Associations Between Parent Characteristics and Acceptability of Exposure-Based Treatments For Child and Adolescent Anxiety

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ACCEPTABILITY OF EXPOSURE FOR CHILD AND ADOLESCENT ANXIETY

ASSOCIATIONS BETWEEN PARENT CHARACTERISTICS AND ACCEPTABILITY OF EXPOSURE-BASED TREATMENTS FOR CHILD AND ADOLESCENT ANXIETY

ALLISON RUMELT, M.S.

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Abstract

Cognitive-behavioral therapy (CBT), particularly exposure therapy, is the most effective treatment for anxiety disorders in children and adolescents (Kendall et al., 2005). Little research has been done to explore parent acceptability of treatment for anxiety in children and adolescents, and no research has explored the acceptability of exposure for this population. The purpose of the present study was to examine parent acceptability of exposure for child and adolescent anxiety as well as variables associated with acceptability. Parents completed a demographic questionnaire, the Clinically Useful Anxiety Outcome Scale (Zimmerman et al., 2010), and the Family Accommodation Scale – Anxiety (Lebowitz et al., 2013). They then watched a brief video of a clinician explaining exposure to the parent of a child client. Lastly, they completed an assessment of their beliefs about exposure and rated the acceptability of exposure utilizing the Treatment Evaluation Inventory (Kazdin, 1980). Parental anxiety, accommodation, and endorsement of negative beliefs about exposure were hypothesized to negatively correlate with the acceptability of exposure. No significant associations were found between the variables. Exposure therapy was found to be acceptable by parents, as evidenced by a mean TEI-SF score that was above the cutoff for moderate acceptability. Theoretical implications relating to our understanding of parental factors influencing acceptability of exposure, as well as other factors that may be associated with acceptability of exposure, are discussed.
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Associations Between Parent Characteristics and Acceptability of Exposure-Based Treatments for Child and Adolescent Anxiety

Anxiety disorders are characterized by excessive fear and worry and behavioral avoidance of feared stimuli (American Psychiatric Association, 2013). They are associated with impairments in functioning across numerous domains, including family functioning, interpersonal engagement, and academic performance (Albano et al., 2003; Ezpeleta et al., 2001; Hill et al., 2016). These disorders are common in children and adolescents (Albano et al., 2003; Higa-McMillan, et al., 2016), with prevalence rates by 18 years of age ranging from 7 to 32% (Ghandour et al., 2019; Hill et al., 2016; Patel et al., 2018). Cross-sectional research suggests an association between internalizing symptoms and decreased life satisfaction (Fergusson et al., 2015). Some studies have found that anxiety in youth is associated with lower academic performance, though the data are equivocal (Swan & Kendall, 2016).

Anxiety in youth is frequently accompanied by somatic symptoms and psychiatric comorbidities such as depression (Cummings et al., 2014; Garber & Weersing, 2010; Greco et al., 2005; Gregory & Eley, 2007). Comorbid attention-deficit/hyperactivity disorder and oppositional defiant disorder are also common (Cunningham & Ollendick, 2010; Palitz et al., 2018), with point prevalence rates for comorbid attention-deficit/hyperactivity disorder ranging from 11 to 23% (Angold et al., 1999; Larson et al., 2011; Palitz et al., 2018) and from 7 to 14% for comorbid oppositional defiant disorder (Boylan et al., 2007). Children with anxiety may also be at a higher risk for substance abuse (Higa-McMillan et al., 2016). Childhood anxiety disorders are also associated with poorer health outcomes (Copeland et al., 2014) and interpersonal difficulties in young adulthood (Brumarius et al., 2013; Essau et al., 2014; Swan & Kendall, 2016).
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Current understanding of the development and maintenance of child and adolescent anxiety highlights familial factors implicated in the transmission of anxiety, including both genetic and environmental pathways (Gregory & Eley, 2007; Hettema et al., 2001; Steinhausen et al., 2009). Genetic vulnerabilities interact with environmental factors, with research demonstrating a relationship between the family environment and the child’s psychological functioning (Ballash et al., 2006). One environmental familial characteristic linked to child anxiety is parental overcontrol, which refers to parental behaviors that impede the child’s ability to develop autonomy (Van Der Bruggen et al., 2008). Results of longitudinal studies suggest a causal relationship in which parental control leads to increased anxiety among youth (Rapee, 2012). Control behaviors are thought to increase the risk of child anxiety as they limit the child’s opportunities to confront challenges and develop mastery in their ability to cope (Affrunti & Ginsburg, 2012; Bögels & Brechman-Toussaint, 2006).

Several theorists highlight the role of learning and conditioning in the development and maintenance of anxiety. An early theory that conceptualizes anxiety as the result of two learning processes is attributed to Mowrer (1939, 1947). First, through respondent conditioning, a neutral stimulus becomes paired with a feared stimulus. This previously neutral stimulus subsequently elicits conditioned fear responses. After this association is formed, the individual begins to avoid the conditioned, anxiety-inducing stimulus, and the avoidance behavior is negatively reinforced due to the reduction in anxiety following engagement in this behavior. The anxiety thus develops through classical conditioning and is maintained by operant conditioning. In the 1970s, Bandura (1977) suggested that anxiety may be acquired by observing others engaging in avoidance or reacting to a stimulus anxiously. As the individual subsequently avoids the anxiety-inducing stimulus, corrective learning fails to occur, and the anxiety is maintained. More recently, Barlow
ACCEPTABILITY OF EXPOSURE FOR CHILD AND ADOLESCENT ANXIETY (2002) suggested that anxiety results from the interaction of three factors: a generalized biological vulnerability, a generalized psychological vulnerability, and a specific psychological vulnerability. The generalized biological vulnerability refers to genetic factors, namely the genetic basis of temperament, influencing the likelihood of developing an emotional disorder. Underlying temperamental factors such as behavioral inhibition, high levels of neuroticism, and negative affectivity are implicated in the development of internalizing disorders, including anxiety (Garber & Weersing, 2010). Particular early life experiences contribute to a generalized psychological vulnerability characterized by a sense of unpredictability and perceived lack of control over one’s environment, both of which are at the core of negative affect states such as anxiety and depression. Lastly, the specific psychological vulnerability relates to learning experiences influencing the focus of the anxiety or particular disorder that the individual develops. For example, in the development of specific phobia, a child may learn through modeling by a caregiver that particular situations or objects should be feared.

Since the first randomized clinical trial (RCT) exploring the effectiveness of CBT for children with anxiety disorders (Kendall, 1994), numerous RCTs have shown that cognitive-behavioral therapy (CBT) is an effective treatment for children with anxiety disorders (Albano & Kendall, 2002; Barrett et al., 2001; Flannery-Schroeder & Kendall, 2000; Kendall et al., 2008; Kreuze et al., 2018; Norton & Price, 2007). CBT for child and adolescent anxiety focuses on developing coping skills to address anxiety and minimize anxious avoidance. Specific components of CBT for anxiety include psychoeducation, cognitive restructuring, relaxation training, problem-solving skills, exposure to feared stimuli, and relapse prevention planning (Albano & Kendall, 2002; Kendall et al., 2005).
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A review of 111 treatment outcome studies for child and adolescent anxiety found CBT to be a well-established treatment with strong research supporting its efficacy (Higa-McMillan et al., 2016). The results of the Child/Adolescent Anxiety Multimodal Study, a large-scale randomized control trial evaluating the efficacy of CBT, sertraline, and a combination of the two in the treatment of child and adolescent anxiety, demonstrated the effectiveness of CBT and sertraline for children and adolescents with diagnoses of generalized anxiety disorder, separation anxiety disorder, and social anxiety disorder (N = 488). The study found that all treatments (combined, CBT alone, and sertraline alone) were superior to placebo, that the sertraline and CBT treatments yielded similar results, and that the combined treatment was superior to all other conditions (Compton et al., 2014). Approximately 59 to 65% of children with diagnosed anxiety disorders who are treated with CBT show a meaningful reduction in symptoms following the completion of treatment (James et al., 2015; Kendall et al., 2005).

Exposure is one of the core elements of CBT for anxiety and a first-line treatment for anxiety disorders among adults, as demonstrated by numerous meta-analyses (Chorpita & Daleiden, 2009; Deacon & Abramowitz, 2004; Olatunji et al., 2010; Pittig et al., 2019). Compared to pharmacotherapy, exposure-based treatment is typically more cost-effective and leads to comparable short-term outcomes as well as superior long-term outcomes (Deacon & Farrell, 2013). Exposure involves repeatedly approaching anxiety-inducing stimuli to decrease associated avoidance and anxiety (Abramowitz, 2013). Several mechanisms of change have been theorized to explain how exposure therapy leads to improvement in symptoms, including counterconditioning (Paunović, 2003), habituation (Foa & Kozak, 1986), development of coping skills (Kendall et al., 2005), and inhibitory learning (Craske et al., 2014). Exposure to feared stimuli is also a key component of CBT for child anxiety (Kazdin & Weisz, 1998; Kendall et al.,
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2005; Settipani & Kendall, 2017) and appears to be effective for children (Kendall et al., 2005). In assessing mediators of change in the Child/Adolescent Anxiety Multimodal Study described above, Kendall et al. (2016) highlighted behavioral change as an important treatment target as avoidance behavior is a defining feature of pathological anxiety. In this study, the introduction of exposure was followed by a significant increase in the rate of treatment progress, suggesting that exposure tasks are critical to positive treatment outcomes as they contribute to the development of coping strategies (Peris et al., 2015).

Although a substantial body of research including numerous randomized control trials and meta-analyses demonstrates the efficacy of exposure therapy in the treatment of anxiety, it is underutilized by clinicians (Deacon & Farrell, 2013). In a survey of 217 psychotherapists treating post-traumatic stress disorder, only 17% endorsed using exposure therapy (Becker et al., 2004). Similarly, reports of 684 practitioners indicated that exposure was utilized to treat anxiety in less than 50% of cases (Pittig & Hoyer, 2017). Among 51 therapists who specifically endorsed a cognitive-behavioral orientation, fewer than 50% reported using exposure with anxious clients (Hipol & Deacon, 2013). Similar findings were reported in a survey of 69 clinicians who endorsed using cognitive-behavioral techniques in the treatment of obsessive-compulsive disorder, with 38% of clinicians stating that they “frequently” used exposure and response prevention and 26% stating that they “never or rarely” used it (Freiheit et al., 2004). Some clinicians utilize arousal-reduction strategies in conjunction with exposure, which limits the effectiveness of exposure by reinforcing avoidance and preventing disconfirmation of beliefs about the intolerability of anxiety (Hipol & Deacon, 2013). Others refrain from engaging in exposures that they believe will provoke very high levels of anxiety or terminate exposures prematurely (Farrell et al., 2013).
Several factors are thought to contribute to therapist underutilization and suboptimal delivery of exposure, including beliefs about exposure, anxiety, and anxiety sensitivity. Negative beliefs endorsed by clinicians and thought to impact exposure use include the idea that exposure is unethical, is likely to harm clients, will increase the likelihood of dropout, and may be harmful to the therapist (Farrell et al., 2013). Additionally, therapists with greater anxiety report increased concerns about the tolerability and safety of exposure therapy and are more likely to refrain from using it with clients (Meyer et al., 2014). One study found that participants who endorsed more negative beliefs about exposure therapy reported significantly greater anxiety when administering the treatment than clinicians with fewer negative beliefs (Farrell et al., 2013). Lastly, anxiety sensitivity, or the fear of internal anxiety experiences due to the belief that these symptoms are harmful, is associated with greater endorsement of barriers to implementation of exposure therapy (Reid et al., 2017) and a higher likelihood of excluding clients from the treatment (Meyer et al., 2014).

Therapists’ knowledge of exposure also impacts the use and perceptions of this treatment. In a survey of 230 clinicians treating youth with anxiety disorders, 48% endorsed a lack of training as a barrier to the use of exposure therapy (Reid et al., 2017). Providers who attended a brief workshop on exposure therapy evidenced improvements in their knowledge of exposure and a significant decrease in their negative beliefs about exposure post-training (Farrell et al., 2016). In a study of 34 therapists, those who did not use exposure with clients endorsed significantly more negative beliefs than those who endorsed utilizing this treatment. However, when both groups of therapists re-rated their beliefs about exposure after a 90-minute teaching session about exposure, there was not a significant difference between the means of the two groups (Waller et al., 2016).
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Among clinicians working with children, there are additional concerns regarding the use of exposure. In a survey of 331 therapists, 81% of whom endorsed a CBT orientation, 40% did not report utilizing exposure in treating child anxiety (Whiteside et al., 2016). Clinicians may hesitate to use exposure with children due to concerns that it will negatively impact the therapeutic alliance with children and their parents, that children do not have the developmental capacity to handle exposures (Reid et al., 2018), or that the child may not fully understand the treatment and rationale (Gola et al., 2016). In a survey of 230 clinicians treating youth anxiety, the top three reported barriers to use of exposure with anxious youth were session length (endorsed by 56% of clinicians), lack of training (endorsed by 48% of clinicians), and concerns regarding parental reactions to this treatment (endorsed by 47% of clinicians) (Reid et al., 2018).

Parent Involvement in Treatment

In working with youth in the context of CBT and exposure for anxiety, parents may be involved in three ways: as consultants, helping the clinician understand the nature of the problem, as co-clients, when parental behaviors contribute to or maintain the child’s symptoms, or as collaborators, assisting in the implementation of treatment (Kendall, 2006). While some evidence-based treatment protocols include parents solely as facilitators or co-therapists to promote skills generalization beyond treatment sessions, others focus on psychoeducation, teaching parents CBT techniques to use with their children, and addressing parental behaviors thought to contribute to anxiety. For example, Coping Cat (Kendall & Hedtke, 2006) is a child-focused anxiety treatment, with more informal parent involvement and two (of 16) sessions designated as parent sessions without the child. In contrast, the Supportive Parenting for Anxious Childhood Emotions (Lebowitz et al., 2013) and Timid to Tiger (Cartwright-Hatton, 2010) programs exclusively involve parents.
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In addition to determining how to formally involve parents in treatment, clinicians must consider parent perspectives regarding treatment. Several studies indicate that the match between treatment and parents’ pretreatment expectations is associated with greater treatment retention and improved treatment outcomes (Morrissey-Kane & Prinz, 1999; Nock & Kazdin, 2001; Wichstrom et al., 2012). Parent perspectives may be understood in terms of treatment acceptability, which refers to the beliefs of clients or other individuals about whether particular treatment procedures are appropriate, reasonable, and fit the presenting problems of the client (Kazdin, 1981). Factors influencing treatment acceptability include the problems and types of clients that the treatment is being used for, whether or not alternative treatments have been discussed, and how the treatment is implemented. Greater treatment acceptability is positively associated with treatment engagement and adherence (Reimers et al., 1992). It is also positively associated with client satisfaction with treatment and treatment outcomes (MacKenzie et al., 2004; Reimers et al., 1992; Reimers & Wacker, 1988). Adherence to treatment and maintenance of behavior change resulting from therapy are greater when parents perceive treatment as acceptable and effective (Roberts et al., 2016).

The majority of research examining treatment acceptability for child and adolescent psychopathology has focused on treatment for externalizing disorders (Bennett et al., 1996; Gage & Wilson, 2000; Johnston et al., 2008; Jones et al., 1998; Kazdin, 1984; Kazdin, 2000; Sciutto, 2015), while relatively few studies have explored preferences for and perceptions of treatment for anxiety disorders. A study assessing parents’ decision-making processes and information needs regarding treatments for child anxiety found that parents desired greater involvement in decisions about their children’s treatment (Mak et al., 2014). The authors noted that many of the respondents wanted clinicians to provide information about suggested interventions but
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ultimately allow the parent to make the final decision about treatment. The respondents also identified information about the treatment, including the approach and length of the intervention, as a key factor in treatment decisions. When parents’ treatment preferences differed from the clinician’s, their values, beliefs, and preferences were the determining factors in choosing a treatment for their children’s anxiety (Mak et al., 2014).

The limited research on parental treatment acceptability for child anxiety indicates that parents view CBT as more acceptable than medication for anxiety disorders (Brown et al., 2007; Roberts et al., 2016). As exposure is a key component of CBT for child anxiety (Kazdin & Weisz, 1998; Kendall et al., 2005; Settipani & Kendall, 2017), it is important to understand factors associated with the acceptability of this treatment. However, no research has explored parent acceptability of exposure therapy for children. Furthermore, no studies have examined associations between parent variables and acceptability of exposure for child and adolescent anxiety.

One variable that may be associated with parental acceptability of exposure for child and adolescent anxiety is parents’ own level of anxiety. Parents of children with anxiety often experience elevated anxiety themselves (Beidel & Turner, 1997; Bögels, & Brechman-Toussaint, 2006), and parental anxiety has been found to be associated with treatment outcomes (Settipani, 2013). Results of numerous studies indicate that children with at least one anxious parent, indicated by surpassing a threshold on a self-report measure or the presence of a diagnosed anxiety disorder, respond less favorably to CBT than children whose parents do not have elevated levels of anxiety (Bodden et al., 2008; Cobham et al., 1998; Cresswell et al., 2008). A hypothesized mechanism for the relationship between parent characteristics and child treatment outcomes is that parents of anxious youth demonstrate a limited ability to tolerate seeing their
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children in distress. These parents may be more likely to reinforce their children’s anxious avoidance, which can impact the effectiveness of exposure therapy as the treatment involves intentionally engaging with anxiety-provoking stimuli (Tiwari et al., 2008). Similarly, parents of anxious youth are less likely than parents of non-anxious youth to encourage engagement with anxiety-provoking stimuli and more likely to model avoidant behavior (Hudson & Rapee, 2001; Silk et al., 2013, Walker, 2012; Wei & Kendall, 2014).

A second variable that may be associated with parental acceptability of exposure for child and adolescent anxiety is engagement in accommodative behavior. Parental anxiety and concerns about their children’s ability to cope with anxiety-provoking stimuli are associated with engagement in accommodative behavior, which has been demonstrated to negatively impact treatment outcomes (Kagan et al., 2016; Silk et al., 2013). Accommodation refers to caregiver involvement in efforts by the child to limit anxiety by avoiding anxiety-provoking stimuli (Taboas et al., 2015). Recent research has highlighted accommodation as a barrier to exposure therapy, noting that parental behaviors that attempt to minimize the child’s anxiety by removing them from an anxiety-provoking stimulus or engaging in proactive avoidance may limit the effectiveness of treatment (Kagan et al., 2016; Lebowitz et al., 2013; Suveg et al., 2006). In the treatment of youth with obsessive compulsive disorder, higher pretreatment parental accommodation was found to be negatively associated with treatment gains (Merlo et al., 2009). Accommodation relates to parental anxiety, as parents who are anxious are more likely to engage in accommodative behavior (Meyer et al., 2018; Wisseman et al., 2018). However, parents may engage in accommodation for other reasons such as to avoid short-term worsening of the child’s symptoms or aggressive behavior from the child as a result of not accommodating (Lebowtiz et al., 2014)
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A third variable that may be associated with parental acceptability of exposure is parents’ beliefs about exposure. While little is known about the relationship between parents’ beliefs about exposure and acceptability, negative clinician beliefs about exposure are hypothesized to contribute to the underutilization and suboptimal delivery of exposure (Farrell et al., 2013). The Therapist Beliefs About Exposure Scale (TBES) is a 21-item measure that has been used to examine the extent to which therapists endorse negative beliefs about exposure as well as how that impacts treatment (Deacon et al., 2013). Beliefs assessed by this measure include the perception of exposure as aversive, inhumane, harmful, and associated with a poorer therapeutic alliance. A review of 684 psychotherapists’ responses on the TBES found that negative beliefs about exposure were associated with decreased treatment usage (Pittig et al., 2019).

Study Purpose and Rationale

While exposure therapy is a central component of treatment for child and adolescent anxiety, parent perspectives regarding this treatment have scarcely been explored. More specifically, no research has reported parent acceptability of exposure for child and adolescent anxiety as no work has examined variables associated with acceptability. The first aim of the present study was to report descriptive statistics of parental acceptability of exposure for anxiety among children and adolescents. The second aim was to examine variables associated with parental acceptability of exposure for child and adolescent anxiety, namely parent anxiety, engagement in accommodation, and (negative) beliefs about exposure. It was hypothesized that parental anxiety, accommodation, and negative beliefs about exposure would be negatively correlated with acceptability of exposure.
Method

Participants

Participants were recruited for this study through 45 Facebook groups. As shown in Figure 1, 301 participants began the online survey. Twenty-six respondents who were not the parent of an anxious child between the ages of six and 17 years, or who completed the survey twice, or who responded to all questions with a zero, were excluded. There were 68 participants who did not complete all measures and were considered non-completers. Thirteen of the non-completers completed only the consent form, and six completed only the consent and demographic questions. Of the remaining 49 non-completers, 19 completed the consent, the demographic questions, and the CUXOS; 23 completed the consent, demographic questions, CUXOS, and FASA; and seven completed the consent, demographic questions, CUXOS, FASA, and at least one question of the TEI. These participants \( n = 49 \) were included in the final analyses following data imputation.
Participants included in the final analyses were 256 parents who self-identified as having an anxious child aged six to 17 years, with a mean child age of 11.34 (SD = 3.09). This is the approximate age range included in treatment manuals focusing on exposure for children with anxiety (e.g., Unified Protocols for Transdiagnostic Treatment of Emotional Disorders in Children and Adolescents, 6 to 18 years, Ehrenreich-May et al., 2017; C.A.T. Project, 12 to 18 years, Kendall et al., 2002; Coping Cat, 7 to 13 years, Kendall & Hedtke, 2006). Participants endorsed having an anxious child when agreeing to participate in the study, as the recruitment
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materials read by all participants prior to beginning the study indicated that the researchers
sought parents of anxious children between the ages of six and 17 years. During the study,
participants were also asked to indicate “how old is the anxious child you are completing this
survey about,” though there were no formal measures assessing child anxiety. Parents primarily
identified as female (n = 178), and approximately 50% of children selected by parents in this
study were male (n = 128). The mean age of participants was 39.82 years (range = 21-66, SD =
7.59), and the mean age of participants’ children was 11.34 years (SD = 3.09). Table 1 provides
additional sociodemographic characteristics of the sample.

Table 1
Sociodemographic Characteristics of the Sample

<table>
<thead>
<tr>
<th>Variable</th>
<th>n</th>
<th>%</th>
<th>Variable</th>
<th>n</th>
<th>%</th>
</tr>
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<tbody>
<tr>
<td>Living Area</td>
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<td></td>
<td>Education Level</td>
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<tr>
<td>Urban</td>
<td>122</td>
<td>47.66</td>
<td>Grades 1-8 (elementary)</td>
<td>9</td>
<td>3.52</td>
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<tr>
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<td>Grades 9-11 (some high school)</td>
<td>23</td>
<td>8.98</td>
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<tr>
<td>Exurban</td>
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<td>5.08</td>
<td>High school diploma or equivalent</td>
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<td>11.33</td>
</tr>
<tr>
<td>Rural</td>
<td>9</td>
<td>3.52</td>
<td>Some college</td>
<td>68</td>
<td>26.56</td>
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<tr>
<td>Gross Income</td>
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<td></td>
<td>College degree</td>
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<td>30.86</td>
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<td>Under $15,000</td>
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<td>3.52</td>
<td>Post-college degree</td>
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<td>18.75</td>
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<td>11.72</td>
<td>Race</td>
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<td>19.53</td>
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<td>5.08</td>
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<td>Black or African American</td>
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<td>$75,000 to $100,000</td>
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<td>13.28</td>
<td>Native Hawaiian or Other Pacific Islander</td>
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<td>3.91</td>
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<td>12.89</td>
<td>White or Caucasian</td>
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<td>7.42</td>
<td>Multiracial</td>
<td>3</td>
<td>1.17</td>
</tr>
</tbody>
</table>
Measures

Demographic Questionnaire

Participants completed a demographic questionnaire developed for this study which included questions about their gender, race/ethnicity, age, educational level, and income, as well as their anxious child’s gender and age. Participants were also asked if they identified as living in an urban, suburban, exurban (a region or settlement that lies outside a city and usually beyond its suburbs), or rural setting (see Appendix A).

Clinically Useful Anxiety Outcome Scale (CUXOS)

The CUXOS (Zimmerman et al., 2010) is a 20-item self-report measure for individuals 18 years old and above consisting of statements reflecting psychic and somatic symptoms of anxiety (see Appendix B). Items are rated on a five-point Likert-type scale to describe how often the person experienced the symptom of anxiety over the past week (ranging from “not at all true” to “almost always true”), including the day on which they are completing the assessment. Example items include “I felt anxious” and “I was short of breath.” Total scores range from zero to 80, with higher scores reflecting greater anxiety. The CUXOS has good internal consistency (Cronbach α = 0.95) and test re-test reliability (r = 0.90), and is significantly correlated with the Beck Anxiety Inventory (r = .79, P < .001) as well as the Penn State Worry Scale (r = .54) (Zimmerman et al., 2010).
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*Family Accommodation Scale – Anxiety (FASA)*

The FASA (Lebowitz et al., 2013) is a 13-item scale used to measure the frequency of accommodation and consequences of engagement in accommodation for the parent and child over the past month (see Appendix C). The first nine statements, assessing frequency, are evaluated on a five-point Likert-type scale (0 = Never, 4 = Daily). The sum of these items reflects the total anxiety score, with a range of 0 to 36. Higher scores reflect greater engagement in accommodative behavior. A sample item is “how often did you reassure your child?” The last four statements, assessing parental distress associated with accommodative behavior and the child’s short-term reaction to parents’ refusal to engage in accommodation, are also evaluated on a five-point Likert-Type scale (0 = No, 4 = Extreme). A sample item is “does helping your child in these ways cause you distress?” The first nine items of the FASA demonstrate good internal consistency (α = .87) (Lebowtiz et al., 2014) and the overall measure demonstrates strong test-retest reliability (r = .79, p < .001) (Lebowitz et al., 2019).

*Treatment Evaluation Inventory Short Form (TEI-SF)*

The TEI-SF, a 9-item measure assessing acceptability of child treatments (Kazdin, 1980), was used to assess parental acceptability of exposure therapy (see Appendix D). Each statement is evaluated on a five-point Likert-type scale (1 = Strongly Disagree, 5 = Strongly Agree), and the sixth item is reverse scored. A total score of 27 reflects moderate acceptability of an intervention. A sample item is “I believe this treatment is likely to be effective.” The TEI-SF demonstrates discriminative validity and strong internal consistency, with a coefficient alpha of .85 (Kelley et al., 1989). Items were modified to reflect that the parent is filling this out regarding their child rather than a general child.
Parent Beliefs About Exposure Scale (PBAES)

The researcher developed an 11-item measure assessing parents’ endorsement of negative beliefs about exposure therapy (see Appendix E), which included items adapted from the Therapist Beliefs about Exposure Scale (TBES). The TBES has strong internal consistency ($\alpha = .96$) and test-retest reliability ($r = .89$) (Deacon et al., 2013). Higher scores on the TBES reflect a greater endorsement of negative beliefs about exposure. Sample items adapted include “most clients have difficulty tolerating the distress exposure therapy evokes” and “exposure therapy often causes clients’ anxiety symptoms to worsen.” These items were modified to reflect that the parent was filling this out regarding a child rather than a client.

Procedure

After approval by the Institutional Review Board (IRB) of Long Island University-Post, participants were recruited through Facebook parenting groups. A description of the study was posted in the groups, and those interested in participating were directed to the study via a link. Participants provided informed consent before beginning this study and selected one of their children whom they identified as anxious. They then completed a demographic questionnaire, followed by the CUXOS and FASA. Next, they watched a one-minute video of a clinician explaining exposure therapy to the parent of a child client (see Appendix F for video script). No parents or children were shown in the video, and it only included the researcher as the clinician describing the treatment. They then completed the TEI-SF to rate the acceptability of exposure therapy, followed by the PBAES. At the end of the survey, participants were given the option to provide their name and email address to be entered into a raffle to win one of two $20 Amazon gift cards.
Results

Completers and Non-Completers

Chi-square tests of independence were conducted to examine whether there were significant differences in the categorical demographic variables (i.e., parent gender, living area, income, level of education, and child gender) between completers and non-completers. Completer and non-completer groups did not significantly differ on any of these variables (see Table 2). Independent samples \( t \)-tests were conducted to examine whether there were significant differences in the means of the continuous variables (i.e., parent age, child age, and CUXOS score) between completers and non-completers. Differences in race and gender between groups could not be assessed because not enough people selected certain options (e.g., only two people selected “Asian” as their race). The groups did not significantly differ on mean child age but did significantly differ on means of parent age and CUXOS scores (see Table 3).

Table 2
Two-Tailed Independent Samples \( t \)-Tests

<table>
<thead>
<tr>
<th>Variable</th>
<th>Completer</th>
<th>Non-completer</th>
<th>( t )</th>
<th>( p )</th>
<th>( d )</th>
</tr>
</thead>
<tbody>
<tr>
<td>Parent age</td>
<td>39.10</td>
<td>42.90</td>
<td>-3.21</td>
<td>.002</td>
<td>0.55</td>
</tr>
<tr>
<td>CUXOS score</td>
<td>32.15</td>
<td>18.14</td>
<td>5.54</td>
<td>&lt; .001</td>
<td>0.92</td>
</tr>
<tr>
<td>Child age</td>
<td>11.35</td>
<td>11.27</td>
<td>0.15</td>
<td>.882</td>
<td>0.03</td>
</tr>
</tbody>
</table>

*Note. N = 256. Degrees of Freedom for the \( t \)-statistic = 61.24. \( d \) represents Cohen's \( d \).*

Table 3
Comparison of Completers and Non-completers on Categorical Demographic Variables (Chi Squares)

<table>
<thead>
<tr>
<th>Variable</th>
<th>Completers ( n )</th>
<th>Non-Comp. ( n )</th>
<th>( \chi^2 )</th>
<th>( df )</th>
<th>Sig. (2-tailed)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Gender</td>
<td></td>
<td></td>
<td>.49</td>
<td>1</td>
<td>.482</td>
</tr>
<tr>
<td>Male</td>
<td>73</td>
<td>5</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Female</td>
<td>134</td>
<td>44</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Educational Level</td>
<td></td>
<td></td>
<td>6.83</td>
<td>4</td>
<td>.145</td>
</tr>
</tbody>
</table>
ACCEPTABILITY OF EXPOSURE FOR CHILD AND ADOLESCENT ANXIETY

<p>| | | | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Grades 1-8 (elementary)</td>
<td>8</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td>Grades 9-11 (some high school)</td>
<td>21</td>
<td>2</td>
<td></td>
</tr>
<tr>
<td>High school diploma or equivalent (e.g. GED)</td>
<td>27</td>
<td>2</td>
<td></td>
</tr>
<tr>
<td>Some college</td>
<td>61</td>
<td>7</td>
<td></td>
</tr>
<tr>
<td>College degree</td>
<td>62</td>
<td>17</td>
<td></td>
</tr>
<tr>
<td>Post-college degree</td>
<td>28</td>
<td>20</td>
<td></td>
</tr>
<tr>
<td>Household Income</td>
<td></td>
<td></td>
<td>46.1</td>
</tr>
<tr>
<td>Under $15,000</td>
<td>8</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td>$15,000 to $30,000</td>
<td>29</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td>$30,000 to $45,000</td>
<td>45</td>
<td>5</td>
<td></td>
</tr>
<tr>
<td>$45,000 to $60,000</td>
<td>28</td>
<td>4</td>
<td></td>
</tr>
<tr>
<td>$60,000 to $75,000</td>
<td>11</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>$75,000 to $100,000</td>
<td>26</td>
<td>8</td>
<td></td>
</tr>
<tr>
<td>$100,000 to $125,000</td>
<td>26</td>
<td>7</td>
<td></td>
</tr>
<tr>
<td>$125,000 to $150,000</td>
<td>19</td>
<td>5</td>
<td></td>
</tr>
<tr>
<td>$150,000 to $200,000</td>
<td>9</td>
<td>5</td>
<td></td>
</tr>
<tr>
<td>More than $200,000</td>
<td>11</td>
<td>10</td>
<td></td>
</tr>
<tr>
<td>Child Gender</td>
<td></td>
<td></td>
<td>1.57</td>
</tr>
<tr>
<td>Male</td>
<td>104</td>
<td>24</td>
<td></td>
</tr>
<tr>
<td>Female</td>
<td>101</td>
<td>24</td>
<td></td>
</tr>
<tr>
<td>Nonbinary</td>
<td>1</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td>Other</td>
<td>1</td>
<td>0</td>
<td></td>
</tr>
<tr>
<td>Living Area</td>
<td></td>
<td></td>
<td>.05</td>
</tr>
<tr>
<td>Urban</td>
<td>107</td>
<td>15</td>
<td></td>
</tr>
<tr>
<td>Suburban</td>
<td>82</td>
<td>30</td>
<td></td>
</tr>
<tr>
<td>Exurban</td>
<td>10</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>Rural</td>
<td>8</td>
<td>1</td>
<td></td>
</tr>
</tbody>
</table>

**Missing Data**

Little’s MCAR test was used to test whether data were missing completely at random (MCAR). Total scores for 110 measures were missing across 49 participants. Results indicated that the data were not MCAR ($\chi^2 = 74.967, p < .001$). The Expectation Maximization (EM) method was used to estimate and impute values for missing items. Pearson correlations examining the relationship between the TEI and the CUXOS, FASA, and PBAES were
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calculated both with and without the imputed data, and both analyses yielded comparable results (i.e. the significance of relationships did not change between the analyses for the main variables).

Treatment Acceptability

The first aim of this study was to report descriptive statistics on parental acceptability of exposure for child and adolescent anxiety. The mean TEI-SF score was 28.27 (SD = 5.26), which is above the score for moderate acceptability (27) suggested by the developers of the TEI-SF (Kelley et al., 1989). Figure 2 shows a histogram of TEI scores across participants.

Figure 2

*Frequency Distribution of TEI Scores*

Associations Between Parent Characteristics and Treatment Acceptability

The second aim was to examine variables associated with parental acceptability of exposure, namely parent anxiety, engagement in accommodation, and endorsement of negative beliefs about exposure. Table 4 shows the summary statistics for each of the predictor variables.
Contrary to my hypotheses, none of the variables were significantly correlated with acceptability. Additionally, none of the demographic variables were significantly associated with acceptability. The results of these analyses were examined using Holm corrections to control for family-wise error. The correlation coefficient between the CUXOS and TEI-SF was .00 ($p = .949, 95\% \text{ CI} [-0.13, 0.12]$), while the correlation coefficient between the PBAES and TEI-SF was -0.01 ($p = .922, 95\% \text{ CI} [-0.13, 0.12]$), and the correlation coefficient between the FASA and TEI-SF was 0.11 ($p = .080, 95\% \text{ CI} [-0.01, 0.23]$). Though none of the variables were significantly correlated with the TEI-SF, a significant positive correlation was observed between the FASA and CUXOS ($r_p = .38, p = <.001, 95\% \text{ CI} [0.27, 0.48]$), FASA and PBAES ($r_p = .51, p = <.001, 95\% \text{ CI} [0.41, 0.59]$), and CUXOS and PBAES ($r_p = .43, p = <.001, 95\% \text{ CI} [0.32, 0.52]$).

**Discussion**

The purpose of the present study was to assess parent acceptability of exposure for anxiety among children and adolescents and examine whether parent characteristics, namely anxiety, engagement in accommodative behavior, and endorsement of negative beliefs about exposure, are significantly associated with acceptability. This was the first study to explore parent acceptability of exposure therapy for children and adolescents. Overall, the results suggest
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that parents of anxious youth find exposure to be an acceptable treatment, as evidenced by a mean TEI-SF score that was above the cutoff for moderate acceptability as determined by the developers of the TEI-SF (Kelley et al., 1989). This level of acceptability is comparable to acceptability of other treatments for childhood psychological disorders (Pemberton & Borrego 2007; Stewart & Carlson, 2010) and can be understood in the context of the literature indicating that parents tend to prefer psychological treatments over medication when addressing child anxiety (Brown et al., 2007; Chavira et al., 2003).

While the measures assessing parent anxiety, engagement in accommodation, and beliefs about exposure were not significantly associated with the measure assessing treatment acceptability, they were significantly associated with each other. More specifically, higher anxiety was associated with greater engagement in accommodation and endorsement of negative beliefs about exposure. Additionally, higher engagement in accommodation was linked to greater endorsement of negative beliefs about exposure. These findings provide further support for the relationship between parent anxiety, engagement in accommodation, and beliefs about exposure, as well as the use of the measure created for the purposes of this study, the PBAES, to examine these constructs.

Contrary to our hypothesis, we did not find a significant correlation between parental anxiety and acceptability of exposure. Research exploring therapist use of exposure has focused primarily on the relationship between anxiety sensitivity and use of exposure, with greater anxiety sensitivity linked to suboptimal delivery of exposure. However, as studies of clinicians have focused on anxiety sensitivity, or the fear of anxiety-related internal experiences (Deacon et al., 2013; Reid et al., 2017), it is unclear whether anxiety itself is associated with use of exposure. Consistent with our findings, a study examining Dutch therapists’ use of exposure with
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children did not find a significant association between clinician anxiety and use of exposure (de Jong et al., 2020).

The lack of a significant relationship between accommodation and acceptability as well as endorsement of negative beliefs about exposure and acceptability suggest that there may be other factors involved in the relationship between these variables. For example, parents who engage in frequent accommodation may find exposure to be acceptable when delivered by a clinician but may not find it as acceptable if they were the ones delivering the treatment. Additionally, the relationship between beliefs about exposure and acceptability may be impacted by parents’ knowledge of exposure, as research indicates that addressing clinician concerns about exposure and increasing knowledge about this treatment can lead to reductions in negative beliefs about exposure and improved treatment delivery (Farrell et al., 2016).

Though our finding that endorsement of negative beliefs about exposure was not significantly associated with treatment acceptability may seem inconsistent with research indicating that clinician endorsement of negative beliefs about exposure is linked to suboptimal use of this treatment (Keleher et al., 2016; Meyer et al., 2020; Whiteside et al., 2016), it is important to note that willingness to utilize a treatment technique differs from acceptability. While the two constructs are related, a clinician may regard a treatment as acceptable yet still refrain from using it due to other factors such as their own anxiety or discomfort in engaging the client in the treatment.

Several limitations of this study are worth noting. The present study utilized surveys completed online, which may have impacted the quality of the data as it is not possible to determine whether participant responses were accurate reflections of their beliefs and emotions. Further, data may also have been impacted by the lack of a person administering the survey and
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the fact that internet surveys can be accessed at any time and in any setting. For example, it is not possible to verify whether participants were fully paying attention when completing the surveys, and this mode of interview allows for greater multitasking compared to in-person surveys (de Leeuw & Joop, 2018). However, this survey method also allows for participant anonymity, which may lead to more honest responses due to decreased social desirability (Joinson, 1999). Another limitation is that participants with previous experience with exposure therapy were not excluded from the study, though these experiences may have impacted acceptability ratings as greater knowledge of a treatment is associated with increased acceptability (Pemberton & Borrego, 2017). This may have contributed to a bias in the results as knowledge may mediate the relationships between acceptability of exposure and the parental variables examined in this study. As this was a preliminary study, exclusionary criteria were limited in order to gain a more general understanding of acceptability.

Results of the current study suggest several directions for future research. As the present study examined acceptability of a hypothetical treatment, it would be useful to explore whether acceptability ratings differ when presented with information about exposure within the context of actual treatment. While numerous studies have examined acceptability of psychological treatments, both in hypothetical treatment situations and in the context of actual treatment (Berry et al., 2016; Walsh et al., 2018; Zhang et al., 2017), none have compared acceptability ratings from people presented with a particular psychological treatment in a hypothetical scenario and those presented with the same intervention in the context of actual treatment. Research has also not yet examined whether acceptability ratings change if assessed prior to treatment and during or after treatment within the same sample. This is an important area for future research because acceptability may change throughout treatment, which may impact the trajectory of treatment as
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Acceptability is associated with treatment engagement and adherence (Reimers et al., 1992). Thus, understanding factors influencing acceptability, both before treatment and during the course of treatment, can contribute to improved treatment outcomes.

Another question with important theoretical implications that can be addressed by future studies is whether parent characteristics impact acceptability of parent-led exposures, rather than acceptability of clinician-led exposures as examined in this study. Research demonstrates that clinicians who endorse negative beliefs about exposure as well as greater anxiety sensitivity are less likely to utilize exposures and more likely to deliver them in a suboptimal manner (Farrell et al., 2016; Meyer et al., 2014; Reid et al., 2017). It would therefore be important to examine whether anxiety sensitivity and negative beliefs about exposure impact parent-led out of session exposures, particularly in regard to minimizing avoidance behaviors during exposures. Additionally, research suggests that learning about exposure and addressing negative beliefs about this treatment leads to greater acceptability (Farrell et al., 2016; Waller et al., 2016), and that knowledge of a treatment is associated with treatment acceptability (Pemberton & Borrego, 2007). Accordingly, future studies should explore whether knowledge about exposure impacts acceptability among parents as well as if increasing knowledge about exposure and addressing negative beliefs about it impacts acceptability.

The findings of this study have important clinical implications. While the current study did not identify significant relationships between the variables examined and acceptability, parent anxiety, beliefs about exposure and engagement in accommodation impact other aspects of treatment beyond acceptability, and thus must be considered when utilizing exposure with children. For example, a parent who is anxious may find exposure therapy delivered by a clinician to be acceptable as they are not with their child while the exposure occurs, but may not
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engage in practice exposures during the week as they would be faced with their child’s
discomfort which may lead to their own anxiety and avoidance. To address this issue, therapists
should ask parents about their perceptions of the treatment and attempt to identify factors that
may impact treatment prior to starting exposure. Clinicians should therefore still consider the
impact of these variables on treatment adherence and willingness to practice out of session
exposures, as parent perspectives and participation in treatment have important implications for
treatment outcomes. In summation, as exposure therapy is an integral component in the treatment
of anxiety, it is essential that clinicians identify potential barriers to treatment efficacy in order to
maximize treatment outcomes. Though the current study did not identify any significant
predictors of acceptability, it highlights the lack of understanding of factors associated with
treatment acceptability for child and adolescent anxiety, and the need for further research.
References


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https://doi.org/10.1300/J019v29n02_03

https://doi.org/10.1037/a0038402


https://doi.org/f943md

https://doi.org/gd5cqd
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role of parental encouragement of bravery in child anxiety treatment. *Journal of Anxiety Disorders, 27*(5), 439-446. https://doi.org/f49q5n


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Appendix A

Demographic Questionnaire

1. Please select your gender:
   ○ Male
   ○ Female
   ○ Nonbinary
   ○ Other (please specify): ________

2. What is your age? ___

3. Are you Hispanic or Latino?
   ○ Yes
   ○ No

4. Please identify your race:
   ○ Asian
   ○ Native Hawaiian or Other Pacific Islander
   ○ American Indian or Alaskan Native
   ○ White or Caucasian
   ○ Black or African American
   ○ Multiracial
   ○ Other (please specify): _______

5. How would you characterize the area in which you live?
   ○ Urban
   ○ Suburban
   ○ Exurban (a region or settlement that lies outside a city and usually beyond its suburbs)
   ○ Rural

5. What is your gross (before taxes) annual household income?
   ○ Under $15,000
   ○ $15,000 to $30,000
   ○ $30,000 to $45,000
   ○ $45,000 to $60,000
   ○ $60,000 to $75,000
   ○ $75,000 to $100,000
   ○ $100,000 to $125,000
   ○ $125,000 to $150,000
   ○ $150,000 to $200,000
   ○ >$200,000

6. Please mark the highest level of education you have received:
   ○ Grades 1-8 (elementary)
   ○ Grades 9-11 (some high school)
   ○ High school diploma or equivalent (e.g. GED)
   ○ Some college
   ○ College degree
   ○ Post-college degree

If you have more than one anxious child, please pick one whom you will refer to on the following questions and the others referencing a child throughout this study.

7. How old is the anxious child you are completing this survey about? ________

8. Please select your child’s gender:
   ○ Male
   ○ Female
   ○ Nonbinary
   ○ Other (please specify): ________
Clinically Useful Anxiety Outcome Scale (CUXOS)

Please answer these questions in relation to yourself.

<table>
<thead>
<tr>
<th>Question</th>
<th>0</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
</tr>
</thead>
<tbody>
<tr>
<td>During the PAST WEEK, INCLUDING TODAY……</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1. I felt nervous or anxious</td>
<td>0</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>2. I worried a lot that something bad might happen</td>
<td>0</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>3. I worried too much about things</td>
<td>0</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>4. I was jumpy and easily startled by noises</td>
<td>0</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>5. I felt “keyed up” or “on edge”</td>
<td>0</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>6. I felt scared</td>
<td>0</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>7. I had muscle tension or muscle aches</td>
<td>0</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>8. I felt jittery</td>
<td>0</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>9. I was short of breath</td>
<td>0</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>10. My heart was pounding or racing</td>
<td>0</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>11. I had cold, clammy hands</td>
<td>0</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>12. I had a dry mouth</td>
<td>0</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>13. I was dizzy or lightheaded</td>
<td>0</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>14. I felt sick to my stomach (nauseated)</td>
<td>0</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>15. I had diarrhea</td>
<td>0</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>16. I had hot flashes or chills</td>
<td>0</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>17. I urinated frequently</td>
<td>0</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>18. I felt a lump in my throat</td>
<td>0</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>19. I was sweating</td>
<td>0</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>20. I had tingling feelings in my fingers or feet</td>
<td>0</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
</tbody>
</table>
Please answer these questions in relation to your child whom you identified at the beginning of this study.

<table>
<thead>
<tr>
<th>Your name:</th>
<th>Child’s name:</th>
</tr>
</thead>
<tbody>
<tr>
<td>Relationship to child:</td>
<td>Child’s age:</td>
</tr>
</tbody>
</table>

### Participation in symptom-related behaviors the past month

<table>
<thead>
<tr>
<th></th>
<th>Never</th>
<th>1-3 times a month</th>
<th>1-2 times a week</th>
<th>3-6 times a week</th>
<th>Daily</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. How often did you reassure your child?</td>
<td>0</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>2. How often did you provide items needed because of anxiety?</td>
<td>0</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>3. How often did you participate in behaviors related to your child’s anxiety?</td>
<td>0</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>4. How often did you assist your child in avoiding things that might make him/her more anxious?</td>
<td>0</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>5. Have you avoided doing things, going places, or being with people because of your child’s anxiety?</td>
<td>0</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
</tbody>
</table>

### Modification of functioning during the past month

<table>
<thead>
<tr>
<th></th>
<th>Never</th>
<th>1-3 times a month</th>
<th>1-2 times a week</th>
<th>3-6 times a week</th>
<th>Daily</th>
</tr>
</thead>
<tbody>
<tr>
<td>6. Have you modified your family routine because of your child’s symptoms?</td>
<td>0</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>7. Have you had to do things that would usually be your child’s responsibility?</td>
<td>0</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>8. Have you modified your work schedule because of your child’s anxiety?</td>
<td>0</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>9. Have you modified your leisure activities because of your child’s anxiety?</td>
<td>0</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
</tbody>
</table>
### Distress and Consequences

<table>
<thead>
<tr>
<th>Question</th>
<th>No</th>
<th>Mild</th>
<th>Moderate</th>
<th>Severe</th>
<th>Extreme</th>
</tr>
</thead>
<tbody>
<tr>
<td>Does helping your child in these ways cause you distress?</td>
<td>0</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>Has your child become distressed when you have not provided assistance?</td>
<td>0</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>Has your child become angry/abusive when you have not provided assistance?</td>
<td>0</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>Has your child’s anxiety been worse when you have not provided assistance? How much worse?</td>
<td>0</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
</tbody>
</table>
Appendix D

Treatment Evaluation Inventory Short Form (TEI-SF)

*Please place a check mark in the box next to each question that best indicates how you feel about the exposure therapy described earlier. Imagine that you are pursuing this treatment for your anxious child whom you identified at the beginning of this study.*

<table>
<thead>
<tr>
<th></th>
<th>Strongly Disagree</th>
<th>Disagree</th>
<th>Neutral</th>
<th>Agree</th>
<th>Strongly Agree</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. I find this treatment to be an acceptable way of dealing with my child’s problem behavior.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2. I would be willing to use this procedure if I had to change my child’s problem behavior.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>3. I believe that it would be acceptable to use this treatment without my child’s consent.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>4. I like the procedures used in this treatment.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>5. I believe this treatment is likely to be effective.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>6. I believe my child will experience discomfort during the treatment.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>7. I believe this treatment is likely to result in permanent improvement.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>8. I believe it would be acceptable to use this treatment with individuals who cannot choose treatment for themselves.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>9. Overall, I have a positive reaction to this treatment.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Appendix E

Parent Beliefs About Exposure Therapy Scale (PBAES)

Below are statements about exposure therapy for the treatment of anxiety disorders. Please indicate how strongly you agree or disagree with each statement.

**Disagree Strongly = 0 | Disagree = 1 | Unsure = 2 | Agree = 3 | Agree Strongly = 4**

1. Most children have difficulty tolerating the distress exposure therapy evokes.
2. Exposure therapy addresses the superficial symptoms of an anxiety disorder but does not target their root cause.
3. Exposure therapy for children is likely to lead to dropout from therapy.
4. Asking a child to face the things they are afraid of can traumatize them.
5. It is wrong for parents and therapists to purposely evoke distress in child clients.
6. If a child is forced to face his/her anxiety, it will make it worse.
7. Most children perceive exposure therapy to be unacceptably scary.
8. Exposure therapy often causes children’s anxiety symptoms to worsen.
9. Having children conduct exposures in their imagination is sufficient; facing feared stimuli in the real world is rarely necessary.
10. Exposure therapy is inhumane.
11. Most children refuse to participate in exposure therapy.
Today I want to tell you a little bit more about the exposure therapy we talked about using to help Noah with his fear of dogs.

Exposure therapy is a psychological treatment that helps people confront their fears. When people are anxious about something, they tend to avoid it. Even though this avoidance helps reduce our anxiety in the short term, in the long term it can make our anxiety even worse. Exposure therapy does the opposite of avoidance by helping us face our fears. We “expose” the person to the thing they are afraid of and avoid but in a safe and structured way. Over time, this helps to reduce the avoidance and fear.

With Noah, we know that he becomes anxious whenever he sees a dog and avoids being around them. To help Noah, we would make a list of the things he’s afraid of like seeing a dog, being in the same room as a dog, or touching a dog. We would start at the bottom with the thing he is least afraid of and work our way up from easiest to hardest. By exposing Noah to the thing he is afraid of in a safe and structured setting, he is able to test and disprove his belief that dogs are dangerous and scary, and ultimately his avoidance and anxiety should decrease.